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COMPUTERIZATION OF THE FOREST SERVICE RECREATION CABIN RESERVATION SYSTEM

by

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82

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Title: Computerization of the Forest Service Recreation Cabin Reservation System

Abstract: Recreation cabins in the Alaska Region are available to the public through a reservation system. Reservations are necessary due to high demand and the remoteness and high cost of reaching the cabins. The current manual reservation system has been reasonably effective, but, with increased reservations and numbers of cabins, is becoming increasingly cumbersome. Data retrieval from mini-computers are being used successfully for similar recreation facility reservations. This paper discusses the application of computers to the cabin reservation system.

FIGURES

		PAGE NO.
1 & 1a	Ketchikan Area Cabins	2 & 3
2	Cabin Use Permit	5
3	Cabin Maintenance Agreement	6
4	Cabin Book Reservation Sheet	15
5	Cabin Condition Report	16
6	Cabin Information Sheet	17

TABLES

		PAGE NO.
1	Rating of Reservation System Options	22

APPENDICES

		PAGE NO.
A	Draft R-10 Cabin Reservation Direction	27
B	Forest Level Information Processing System (FLIPS) Background Information	28

CONTENTS

		PAGE NO.
I.	Introduction	1
	A. The Reservation System	1
	B. Maintenance Agreements	4
	C. Use Information	7
II.	Objectives	7
	A. Scope	7
III.	Literature Review	7
IV.	Reservation System Alternatives	9
	A. System Description and Needs	9
	B. Manual Reservation System	14
	C. Computerization of Reservation System	18
	1. Micro-computer	19
	2. Mini-computer (FLIPS)	20
V.	Preferred Reservation System	22
VI.	Summary	23
VII.	Implementation	25
VIII.	Bibliography	26
	Appendices	

I. INTRODUCTION

The Alaska Region has a unique system of recreation cabins that are available to the public on a fee system. These cabins are located throughout the Forest on inland lakes, rivers, and saltwater shorelines, as characterized by the Ketchikan Area (Figures 1a and 1b). The remoteness and harsh weather conditions associated with many of the quality recreation opportunities in Alaska require that a reliable, secure shelter be available. These cabins afford one of the most unique and rewarding recreation experiences in the National Forests and continue to increase in popularity each season. Some cabins, located on key fishing and hunting areas or close to population centers, are in such demand that a lottery system must be used to allocate use. Travel to Alaska, as well as to the individual cabins, is very expensive and visitors need assurance that a cabin will be available upon their arrival. A reservation system is used to provide that assurance.

A. The Reservation System

The entire Alaska Region has rented recreation cabins under a generally uniform system. There have been a few characteristics unique to each area which have caused some confusion to visitors. As a result, uniform direction has been prepared and is currently in draft form (Appendix A).

The reservation system involves issuance of a permit (Figure 2) that must accompany the user of the cabin. Permits are issued at a variety of Forest Service administrative locations throughout the Region. The Tongass National Forest is administered through three Areas: Stikine, Chatham, and Ketchikan, each equivalent in organization to an individual National Forest. Each of these three Areas, as well as the Chugach National Forest, administer their own cabin reservation programs, each program varying somewhat based upon the location of reservation facilities.

FIGURE 1a

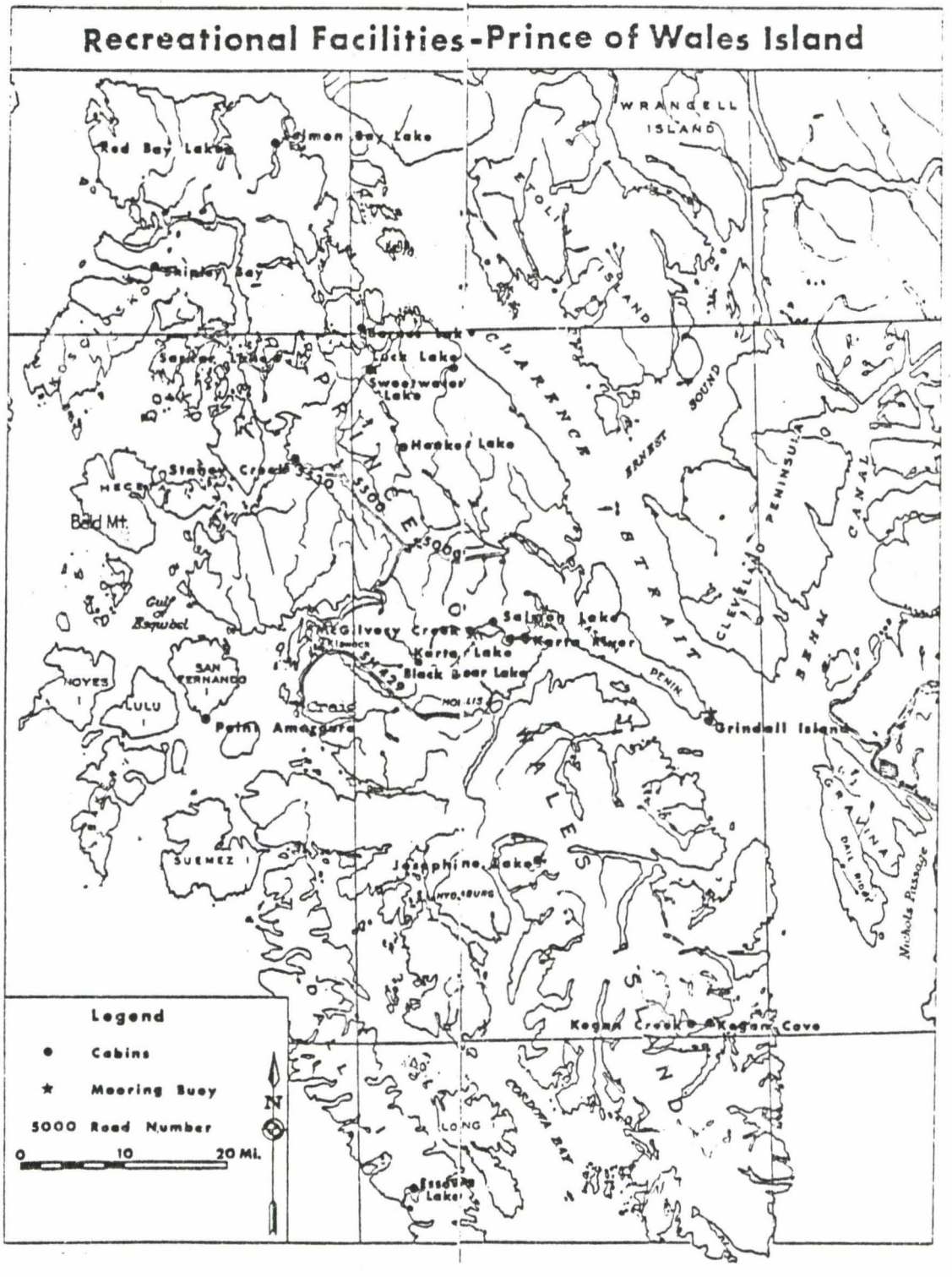
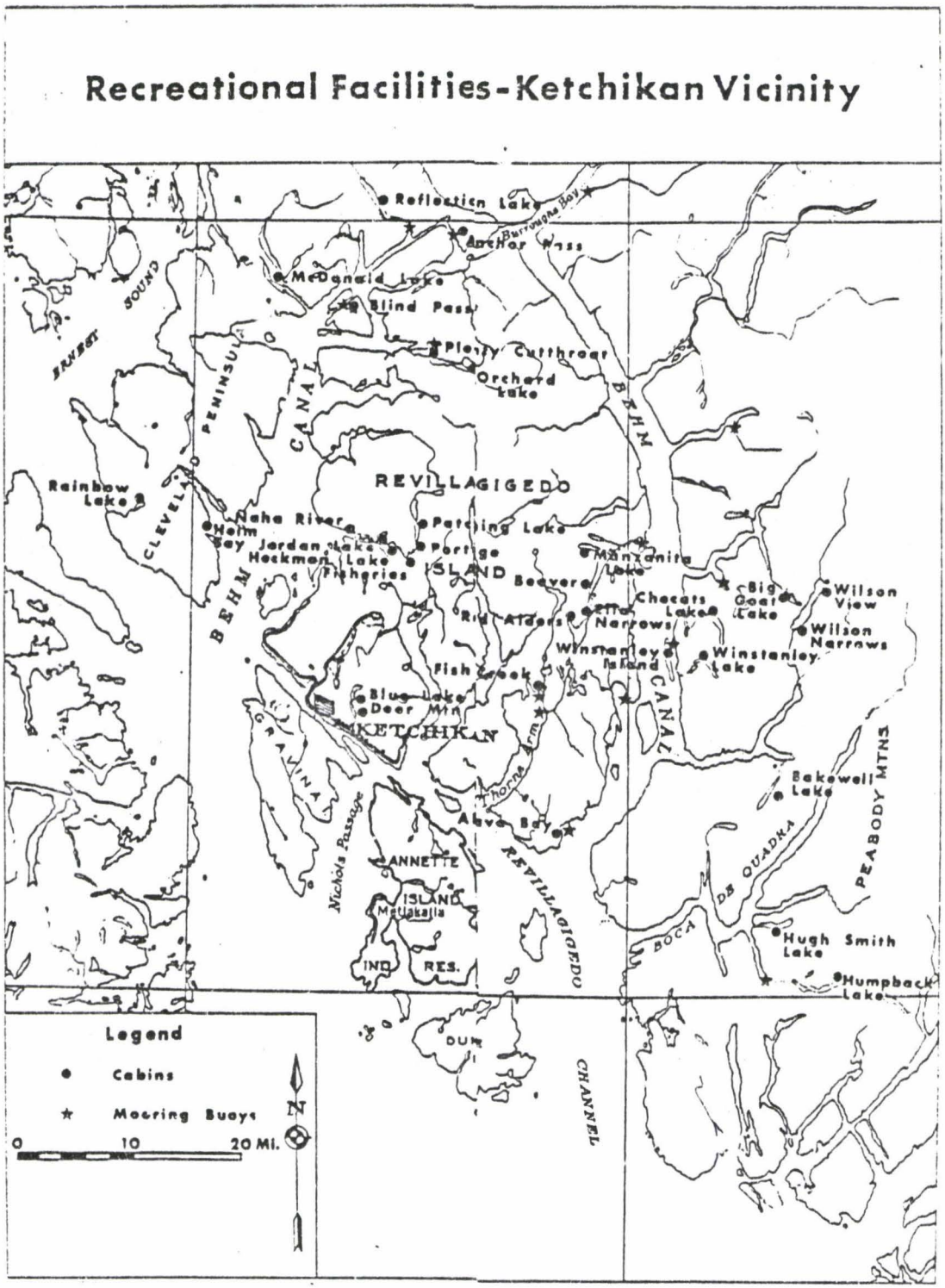

Recreational Facilities-Prince of Wales Island
WRANGELL ISLAND
Red Bay Lake
Salmon Bay Lake
Ashley Bay
Sarkar Lake
Luck Lake
Sweetwater Lake
Hooker Lake
Staney Creek
Bald Mt.
Gut Bayou
Ivory Creek
Karta River
Karta Lake
Black Bear Lake
Craig
Petrl Amagura
SAN FERNANDO
HOYES
LULU
SUEMEZ
Josephine Lake
Grindall Island
Kegan Creek
Kegan Cove
Legend
Cabins
Mooring Buoy
5000 Road Number
0 10 20 Mi.
N

FIGURE 1b


Recreational Facilities - Ketchikan Vicinity
Reflection Lake
Anchor Pass
Burroughs Bay
McDonald Lake
Blind Pass
Ploxty Cutthroat
Orchard Lake
BEHM CANAL
CLEVELAND PENINSULA
SOUND
REVILLAGIGEDO ISLAND
Rainbow Lake
Naha River
Helm Bay
Jordan Lake
Heckman Lake
Fisheries
Portage
Patching Lake
Manzanita Lake
Beavers
Rig Aldens
Checats Lake
Settlers Narrows
Big Goat Lake
Wilson View
Wilson Narrows
Winstanley Island
Winstanley Lake
Fish Creek
Blue Lake
Deer Mtn
KETCHIKAN
Thorne Arm
Bakewell Lake
PEABODY MTNS
Alava Bay
Nichols Passage
ANNETTE ISLAND
Metlakatla IND. RES.
REVILLAGIGEDO CHANNEL
DE QUADRA
BOCA
Hugh Smith Lake
Humpback Lake
DUKE
Legend
Cabins
Mooring Buoys
0 10 20 Mi.
N

The reservation system is rather complex (appendix A). The following key characteristics essentially describe the system:

1. Reservations may be made by phone, writing, or walk-in.

2. Reservations may be made up to 180 days in advance.

3. Reservations, with refund, may be canceled prior to ten days before date of occupancy.

4. In case of cancellation, a list of people desiring use of the cabin is maintained.

5. Reservations are limited to 7 or 10 days depending on the season.

6. Individual reservations are limited to one cabin at a time.

All permits and record-keeping are done manually at this time. Reservations are posted by name, address, and reservation period in the primary file and again in a cabin book for use by walk-in visitors.

This system has worked fairly well, but is very time-consuming and, with the large number of entries and later changes, is vulnerable to error. The most common result of these errors is double-booking of cabins, which is a serious consequence when two parties have invested several hundred dollars to get to the same cabin. These errors will compound as use increases.

B. Maintenance Agreements

The fees, currently $10 per night, are collected under the Granger-Thye Act to be applied to maintenance of the cabin. A maintenance agreement (Figure 3) is completed with each reservation for signing by the applicant. These forms are completed by hand for each transaction.

C. Use Information

The reservation system records are used to develop annual recreation use figures for program planning and budgeting. These figures are gathered manually, which is time-consuming and subject to error, therefore limiting their extent and usefulness.

II. OBJECTIVE

The primary objective of this study is to determine the feasibility and practicality of computerizing the cabin reservation system. The secondary objective is to determine what system would best meet the need.

A. Scope

The scope of this study will be limited to the reservation system on the Ketchikan Area of the Tongass National Forest. The results will be applicable to the entire Region as the systems are essentially the same between administrative units, with the primary difference being how decentralized a system each unit desires.

The Ketchikan Area currently handles all of the reservations through the Supervisor's Office in Ketchikan. There are very few reservations requested at District Offices at this time. Those requests are handled by telephone with the Supervisor's Office.

III. LITERATURE REVIEW

The search for literature dealing with computerized reservation systems resulted in a wide range of applications. The search included contacts with computer sources, Federal, State, and local agencies, Forest Service Experimental Stations, College Resource Departments, and a search by West Fornet.

The most common computer application was in reservation systems used by airlines and travel agencies. The California computerized system of recreation site reservations, called Ticketron, has been successfully operating for a number of years (Burnett 1972). Ticketron and similar systems are set up to handle a specific geographic area where there is a large concentration of sites. These systems do not fit the need for recreation cabins as reservations are made from throughout the United States. The volume of cabin reservations is not high enough to satisfy such an elaborate system. Therefore, no futher review was made of these larger systems.

It became apparent that computerized reservation systems for recreation sites are relatively new, but appear to be increasing in use. Computers are being used in many phases of recreation management, in addition to reservation systems (NRPA 1980). Actual programs currently being used and applicable to the cabin reservation system needs were difficult to locate. There is a lot of interest, but few functioning programs (Siderelis 1983). There did not appear to be any micro-computer programs currently in operation (Siderelis 1983). Since then, a campground reservation system using micro-computers was found (Damon 1983).

Three on-line systems, using mini-computers, that either reserve recreation facilities or issue permits for entry were located (Siderelis 1983):

1. The Wisconsin Department of Natural Resources is currently reserving recreation sites in one State park using a mini-computer linked to their headquarters in Madison, Wisconsin. The system was implemented January 1, 1983, and, if successful, will be expanded to other State parks (Smith 1983).

2. The Superior National Forest, headquartered in Duluth, Minnesota, evaluated the use of computers to issue entry permits to the Boundary Waters Canoe Area (Sober 1982). The system has been implemented and has been successful though continuing modifications have been necessary to improve its utility to the manager (Nowka 1983).

3. The St. Louis, Mo., County Parks and Recreation Department has used a computerized reservation system that has been successfully operated for four years (Farrell 1983). The system reserves a wide variety of sites over several areas.

None of these programs has been operational over a long period of time, so their success and applicability are not totally certain. The St. Louis system is termed a success by their Parks and Recreation Department and has resulted in better service to the public and cost savings to the Department.

All three programs are available for use in developing a program applicable to the recreation cabin reservation needs.

One reservation system using a micro-computer was located on the National Forests in North Carolina.

1. The National Forests in North Carolina have developed a micro-computer program to provide for the reservation of a series of group campgrounds. The system offers many of the same features that would be needed for a cabin reservation system (Damon 1983).

IV. RESERVATION SYSTEM ALTERNATIVES

A. System Description and Needs

Description - Reservations are received and processed in three different ways.

1. Walk-in - Applicants come directly to the reservationist, review the cabin availability, and make their reservations at the same time. The permit and maintenance agreement are completed and fees collected. The transaction is then final.

2. Write-in - Applicants write in for reservations, sometimes using the reservation application included in the recreation facility brochure, but often just a letter requesting a certain cabin by date. Frequently, they include a list of alternative cabins. The permit and maintenance agreement are prepared and then mailed to the applicant with instructions to sign and return the agreement.

3. Call-in - Applicants, other than local, may call in, select a cabin to reserve, and have ten days to make payment. Upon receipt of payment the permit and maintenance agreement are mailed to the applicant, with instructions to sign and return the agreement.

The walk-in applicants consume the least time as they can usually complete their search of available cabins by themselves, which leaves only the permit and agreement preparation and posting to do. The write-in and call-in requires the reservationist to physically review one or more cains for availability. Both systems also involve writing to the applicant and maintaining records until the final reservation is complete. The approximate break-down by type of reservation is 50% walk-in, 30% write-in, and 20% call-in.

During the 1982 season, the Ketchikan Area received approximately 1200 applications for cabin reservations. Of this number, 1000 actual reservations were processed. There were an additional 3000 or more requests regarding availability of cabins. Each request requires a determination of availability. If the cabin is available, a permit and maintenance agreement must be processed, reservations must be posted in the reservation book, and public cabin availability book and other records posted to track mailings, fee payments, and alternate lists. The large number of transactions requires an intricate record keeping system to avoid loss or erroneous logging of reservations which result in double bookings and complicated coorespondence to resolve missed bookings.

In the course of each season there are occasions when a particular group of reservation holders must be contacted by phone or writing. This entails a mechanical search and preparation of a mailing list, a very time-consuming practice. An example was the late spring of 1982 when most lakes remained frozen a month past historic break-up and many permittees had to be informed to cancel their reservation.

Each season, the use figures must be reported, which involves lengthy calculations using the base reservation information. There are other kinds of information that would be helpful to the manager, but the current system makes gathering such data impractical.

Needs - The primary need is a fast, accurate system for data storage and retrieval that can facilitate the reservation system primarily, and can secondarily provide a variety of information for better overall management of the cabin system.

Close control of the cabin reservation system is necessary to provide the most equitable availability of cabins to the public. As the popularity of these cabins has increased, there have been several efforts on the part of commercial tour packagers and air taxi services to circumvent the system and make reservations directly for their clients. Isolated commercial reservations in the past did not result in any serious problem with the general public. Recently, it has become apparent that commercial bookings could rapidly monopolize the use of many of the cabins, particularly those located in prime fishing or hunting areas. The policy requires that individuals make their own applications and the applicant must be a member of the party using the cabin (Appendix A). This potential problem requires the reservation system be maintained within the Forest Service and as decentralized as practicable.

As a minimum, any reservation system must provide the following:

Reservation System:

1. Ability to store, display, and retrieve reservation data for each cabin for a continous period of not less than 180 days. The reservationist must be able to quickly scan any desired cabin for unreserved periods.

2. A display of available cabins for the user to review.

3. Names, addresses, and phone numbers of applicants for current and future use.

4. Listings of alternates where lotteries are needed to issue permits, or individuals wish to be placed on an alternate list in case of a cancellation.

5. Process for fee collection accountability.

6. Preparation of the reservation permit and maintenance agreement form.

Management Information:

1. Total annual use by cabin, by individual visits, length of stay, size of party, and dates of stay.

2. Geographic location of users.

Additional desirable capabilities of a reservation system would include:

Reservation System:

1. Alphabetical listing of applicants by name, address, telephone, and cabin reserved.

2. Automated printing of permits and maintenance agreements.

3. Ability of Ranger Districts to access the information.

4. Capability of printing mailing labels by cabin and date of registration.

5. Capability of printing standard information reply letters using pre-written paragraphs dealing with specific subjects.

Management Information:

1. Listing of cabin use by geographic location of user.

2. Average length of stay by cabins.

3. Average size of parties by cabin and time of season.

4. Current status of fee collections.

5. Numbers of cancellations by cabin and geographic location of user.

6. Listing of cabin use by individual cabin and total use by month.

B. Manual Reservation Systems

1. The Manual System (Existing System)

The current reservation system is centralized in the Supervisor's Office in Ketchikan. There are similar systems throughout the Region with varying degrees of centralization.

The receptionist serves also as the cabin reservationist. There are alternates to fill-in during periods of absence or heavy reservation periods.

There are two sets of cabin books maintained.

a. The reservationists book maintains, for each cabin, monthly reservation sheets covering a minimum of 6 months (Figure 4).

b. The public cabin information and availability book is maintained for use by the walk-in public. It contains a monthly reservation sheet for each cabin plus a cabin condition report (Figure 5), a cabin information sheet (Figure 6), and photos of the cabin. The reservation sheet shows only the days reserved to protect the names and addresses that appear in the reservationists book.

Due to the bulk of information there are three books in each set.

Each request for availability or reservation requires the following actions by the reservationists:

a. Search the appropriate book for availability of the cabin. If not available, search alternates requested or to suggest alternates.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3	4 3-107 $15	5 JOE JUNEAU 1220 GLACIER JUNEAU, AK. 99801 6-1234	6 6 RES. 01/3/82	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21 3-103- 08 $10	22 5 NON-RES. R. HARRIS 369 12th SEATTLE, WA. 01/4/82
23	24	25	26	27	28	29
30	31					

# of permits sold 2
Amount of money collected $25
# of parties 2
# of resident parties 1

# of individuals 11
# of nights 5
# of Nonresident parties 1
# of 12 hour visitor days 56

Month JANUARY

Cabin CHURCH BIGHT

FIGURE 4

FIGURE 5

CABIN _____ DATE: _____
NAME TYPE

Cabin Location _____

Signs - Beach _____
Cabin _____
Boat Pull-up ____
Toilet _____
To Trail _____

Terrain - Rel. Flat _____
Rel. Hilly ____
Wooded _____
Moss Growth ____

Brush _____
Beach _____
Steep Bank ____
Bluff _____

Bunks - Single _____
Double _____
Loft _____

Water Source - Stream _____
Lake _____
Pump _____

Table _____

Boat - Type _____
Number _____

Bench _____

Oars _____ Saw _____

Cooking Bench _____

Ladder _____ Bucket _____

Food Cupboard _____

Shovel _____ Rake _____

Shelves _____

Sledge ____ Maul _____

Cooler _____

Hatchet _____ Wedge _____

Stove - Sm. 2 Burner ____
Other _____

Axe - Single _____
Double _____

Thermometer ____

Log Book _____

Fireplace _____

Broom _____ Dustpan _____

Garbage
- _____ Bags
- ____ Large cans

Incinerator _____

Woodshed _____

Wood Supply _____

Additional Comments:

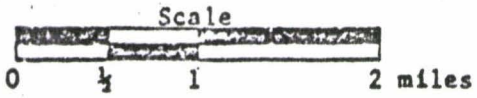
Windfalls in Area _____

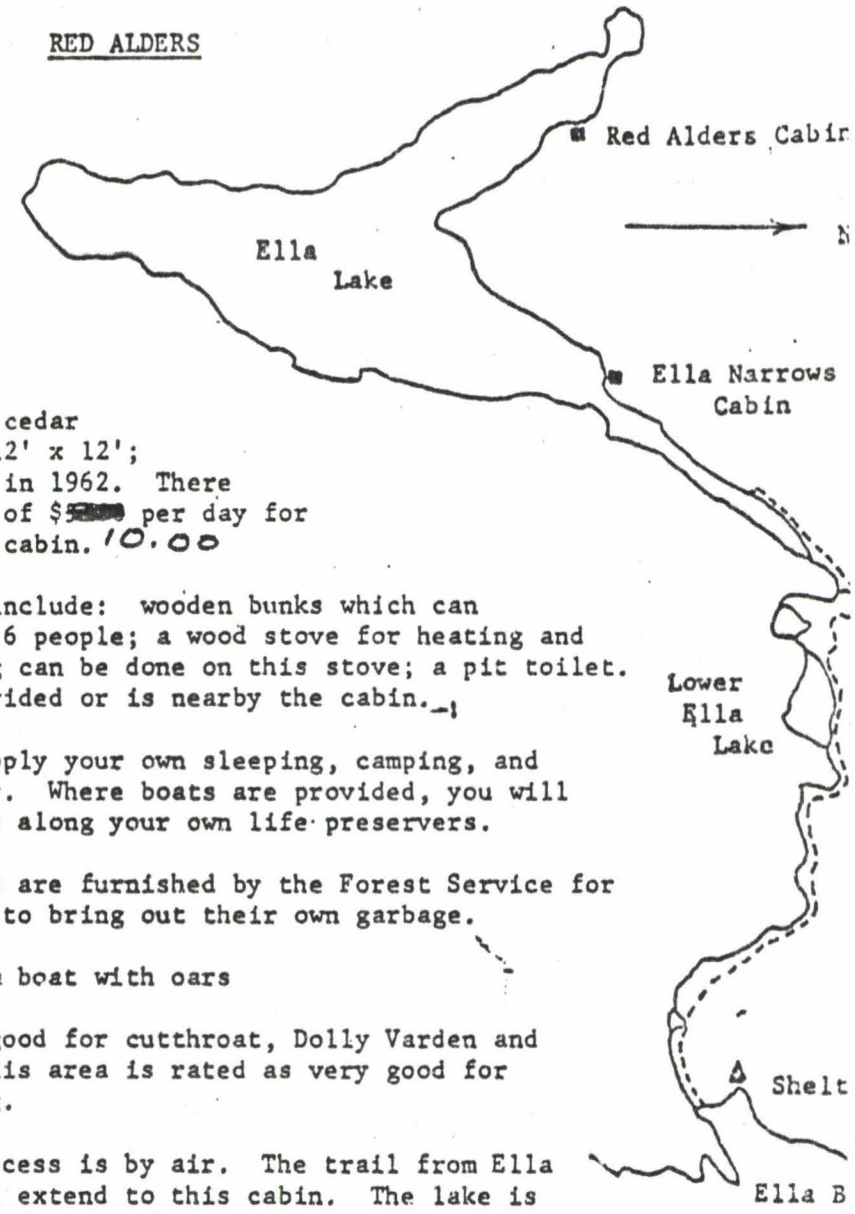
CABIN SKETCH

WOODSHED SKETCH

FIGURE 6

RED ALDERS





Red Alders Cabin: A Pan Abode cedar log cabin; 12' x 12'; constructed in 1962. There is a charge of $[redacted] per day for use of this cabin. 10.00

Facilities include: wooden bunks which can accommodate 6 people; a wood stove for heating and some cooking can be done on this stove; a pit toilet. Wood is provided or is nearby the cabin.

You must supply your own sleeping, camping, and cooking gear. Where boats are provided, you will need to take along your own life preservers.

Plastic bags are furnished by the Forest Service for cabin users to bring out their own garbage.

Boat: 14' aluminum boat with oars

Area Attractions: Fishing is good for cutthroat, Dolly Varden and Kokanee. This area is rated as very good for deer hunting.

Access: Ella Lake access is by air. The trail from Ella Bay does not extend to this cabin. The lake is 24 air miles from Ketchikan.

Elevation: 255 feet

Season of Use: May through November

Use Permits: May be obtained from:

Forest Supervisor - Ketchikan Area
Tongass National Forest

Federal Building
Ketchikan, Alaska 99901

Misty Fiords National Monument

b. Prepare permit and maintenance agreement. If mail or call-in, prepare letter and envelope for mailing.

c. Post the reservation and public information books.

d. Post fee collection documents.

e. Post cuff records for those reservations that must be confirmed by payment through the mail, and for those applicants qualifying as alternates in case of cancellations.

f. Schedule drawings for reservations.

In addition to those immediate actions, the reservationist must:

a. Compile use data required for input to the Recreation Information Management (RIM) system.

b. Update cabin condition sheets in the public information book.

c. Prepare fee collection reports.

This labor-intensive system is slow and cumbersome, but has resulted in reasonable accuracy. There are occasional missed or double bookings that result in very complicated problems when two parties show up at the same cabin, having spent several hundred or more dollars getting there. These cases often occur during turnover in or absence of the primary reservationist.

C. Computerization of Reservation System

Computerization of reservation systems has been successful in similar applications as discussed in Part II of this paper. It appears that either a mini-computer or micro-computer would meet the needs of this reservation system. The applicability of each is discussed below.

The program developed for any computerization of this system would have to provide all of the needs described in Part IV A of this paper. The program would be carefully developed to provide these needs with options for modification identified through use. It is visualized that the following components would be needed to provide an efficient service that would be a significant improvement over the existing manual system.

- The reservationist would have a keyboard, a monitor, and printer(s). The printing capability would include the cabin use permit, the maintenance agreement, and standard letters. The program would eliminate all manual posting or information searching.

- An additional keyboard and monitor would be available to the public for searching cabins for availability, condition and specific cabin information. This information would provide availability only. Names of the permittees would not be shown.

- The entire system would be "user friendly" and as simple as possible to facilitate use by anyone.

- The only non-computerized information would be a base location map and a public use cabin book that contains only pictures and description of each cabin.

1. The Micro-computer

As described in Part III of this paper, one micro-computer program was located that is currently being used for recreation facility reservation systems. There are micro-computer reservations programs for other activities in use (NRPA 1980). Discussions of the reservation system (Siderelis 1983 and Marshall 1983) indicate no reason why a micro-computer would not be adequate for this system. Any of the popular micro-computers (Apple, IBM, Osborne, etc.) could adequately handle the reservation system at a centralized location.

The system would include a keyboard, monitor, disk drive, and printers. Available memory would be adequate for the needed data storage and retrieval.

The entire package would be available for under $7000. Operating expenses would include maintenance, repairs, and printing paper. Maintenance should be minimal on this type of system.

The program could be used throughout the Region on similar equipment. The ability to share information with other field units would be limited, and expensive, with a micro-computer. Input by other units would be limited to commercial telephone updates during slack reservation periods. This limitation is significant in cases where offices accept large numbers of applications for other offices as it would increase the opportunity for double booking and limit the freedom of individual units to make timely reservations.

2. The Mini-computer

As described in Part III of this paper, there are several successful mini-computer recreation reservation systems in service throughout the country. There are several programs available that can be used in part to develop a program that meets the cabin reservation needs.

The Forest Service is in the process of implementing their own Forest Level Information Processing System (FLIPS), which is described in Appendix B. This system will provide all administrative levels of the Forest Service with a tool to handle word processing, entering data, editing data, local information processing, and electronic mail. It will allow all Forest Service units to use the same type of equipment from the same manufacturer. Therefore, any reservation program developed will be compatible with each unit's equipment. There is some question, until the contract is actually issued, whether the Type B computer, located at the Ranger District Level, will be able to handle such a reservation system. It is doubtful that it will. The Type A system, located at the Supervisor's Office and above will have the capability. It is not known, until the specifications are final and the workload defined, whether the Type A computer will have the capacity without causing degradation to the system. As the FLIPS or micro-computer provide the service and would be significantly cheaper, the alternatives of time sharing with other existing systems, or an individual mini-computer for the single purpose of cabin reservations will not be discussed in this paper.

The initial cost of installation becomes irrelevant as the base computer would be in place regardless. There would be additional costs associted with monitors and printers, but these costs should not exceed those of an individual micro-computer. For this reason, and because the cost of accessing FLIPS is not available yet, there is no cost analysis in this paper.

Providing the Type B computer could provide the needed system, FLIPS would provide the alternative to each management unit whether or not they desire to have the reservation system at that level. If dependent upon the Type A computer, the option would exist to maintain the primary reservation facility at a local central office with smaller units capable of accessing the system through a direct line to their own computer. The system will be flexible enough that changes in reservation levels may be made as facilities and use conditions change.

V. PREFERRED RESERVATION SYSTEM

The preferred system, based upon the information reviewed for this document, needs of the system, and likelihood of acquiring the necessary equipment, is the integrating of the reservation system into the Forest Service FLIPS program. The feasibility of using FLIPS will depend on the location of the reservation facility. If reservations are taken at an office with a Type B computer, it is possible that the capability will not exist for implementing a reservation system with FLIPS. If such is the case, it would be preferable to use a micro-computer system.

Table 1 displays the criteria considered in selecting the preferred system.

Table 1. Rating of Reservation System Options

	Manual	Micro-computer	Mini-computer
Public Responsiveness	3 1/	1	1
Accuracy	3	1	1
Increased Data Storage & Retrieval	3	2	1
Software Availability	-	1	1
Reservationist Preference	3	1	1
Computer Manager's Preference	3	2	1
On-line Availability	1	2	3
Added Management Flexibility	3	2	1

1/ A rating of 1 indicates the system that would be most effective, a 3 the least.

This rating is somewhat over-simplified as there will undoubtedly be delays and complications in getting a computerized system on-line. There will be resistance on the part of some public users and potential reservationists due to the common intimidation from computers. The age of computers is here and most people are becoming familiar with simple forms of computerization. By the time this system is operational, few people will be uncomfortable with its use. Internally, all Forest Service employees are becoming aware of computer use, at least through word processing. Adoption of a computerized system will help attract progressive people for reservationist positions.

Above all, the added management flexibility is appealing. Increasing pressures to implement more efficient management practices for cost savings and personnel management requires the capability to assess current and future use trends. Computerization of cabin data should open up a whole new opportunity to assess management options.

Though the micro-computer option may not provide the management flexibility of the FLIPS it would still be an acceptable option when compared to the existing manual system.

VI. SUMMARY

The recreation cabin system in the Forest Service Alaska Region is rapidly growing in popularity, as evidenced by increased reservations. As the numbers of cabins increase, coupled with increase in demand, the reservation system is becoming more complex and time consuming. The use of computers to improve the existing system, provide for further expansion, and provide improved management flexibility has been discussed in this paper.

The current manual system and its capabilities were compared to future needs and management flexibility. The manual system is very labor intensive and will become increasingly unwieldly as the volume of business continues to grow. There is limited opportunity to use the manual system to provide increased management information needed to determine recreation use trends and evaluate management alternatives.

Computerization of the reservation system is feasible through use of micro-computer or mini-computers. There is one micro-computer program found that is comparable to the cabin reservation needs. There are mini-computer programs providing for a variety of reservation systems that, at least in part, offer programming that would be comparable to the cabin reservation system needs. Three of such programs would be available for use in developing a program.

The Forest Level Information Processing System (FLIPS) currently in the process of being contracted for installation at all Forest Service offices may provide the capacity for a cabin reservation system depending upon the equipment contracted and location of reservation office. The uniformity of computer equipment throughout the Region would make the same system feasible and available to any Forest Service office that desires to computerize their reservation system.

A micro-computer system would provide the necessary computer system for units with Type B FLIPS systems that cannot handle such a reservation system.

The benefits of the computerized system over the current manual system include:

- Better public responsiveness.
- Increased accuracy.
- Increased data storage.
- More professionalism for reservationists.
- Increased management flexibility.

As the FLIPS system contacts are issued and the capacity of the equipment is fully known, there may be more opportunity to use the centralized Type A computer for data storage for access by field units to make reservations.

VII. IMPLEMENTATION

The implementation of a computerized reservation system will be dependent upon where the reservations will be made and the capacity and capability of individual FLIPS units. If applications are processed at the District level, a micro-computer will be needed unless there will be the capability of Districts accessing reservation data maintained in the Supervisor's Office FLIPS computer as the Type B FLIPS computer probably will not provide the capacity for a reservation system.

The following action plan is proposed for implementing a computerized reservation system in the Ketchikan Area.

Determine Location of Reservation Processing

Supervisor's Office	District Ranger's Office
Prepare Program for Type A FLIPS Computer 1/	Prepare Justification for Micro-computer
Implement in FY 84 Management Objectives	Upon Approval, prepare program 1/
	Implement in FY 84 Management Objectives

1/ The campground reservation system currently used in the National Forests in North Carolina should be used as a basis for this system. Bill Damon, R-8 programmer of that system, could be detailed to Ketchikan to adapt that program to our needs with the highest efficiency.

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Siderelis, Charles D., Ph.D., School of Forestry, North Carolina State University.
December, 1982 Telephone conversation regarding existing reservation systems.

Siderelis, Chrystos D., Ph.D., School of Forestry, North Carolina State University
January 19, 1983 Letter on existing computerized reservation systems.

Smith, John, Wisconsin Department of Natural Resources, Madison, Wisconsin
February 17, 1983 Telephone Conversation regarding Park System computerized reservation system.

Sober, Toivo
February 1982 An automated Reservation System for the BWCA Wilderness, Superior National Forest, Duluth, Minnesota.

APPENDIX A

TITLE 2300 - RECREATION MANAGEMENT

CAMPGROUNDS AND PICNIC GROUNDS

- Reservation Campground and Picnic Ground Operation

Public Recreation Cabins. Region 10 provides cabins at remote lakes, , and ocean frontages for general recreation, hunting and fishing These cabins are provided for public use because of the health and need for shelter in Alaska and the difficulty of transporting suitable equipment. The cabins provide for the use and enjoyment of the l Forest recreation, fish, wildlife, and other resources.

ermit, Form R10 2300-20, is completed prior to use of a public ion cabin. The form should have the permittee's name, mailing address, ne number, number in party, permit number, initials of the Collection making the reservation, and the date the reservation is made.

nittees are required to have a copy of the permit in possession when cabin.

n office issuing permits shall maintain a Public Cabin Brochure, ing each cabin under its jurisdiction. The brochure will be printed in e quantities and folded in a manner suitable for mailing to prospective applicants.

n office issuing permits shall maintain a Public Cabin Information k, describing cabins under its jurisdiction, with the Cabin Condition R10 2300-24, Exhibit 1), updated annually during cabin maintenance. It ested the Public Cabin Information Notebook also contain: a USGS phy sheet on the scale 1:63360 for each cabin, following the Cabin tion Sheet, Cabin Comment postcards that visitors can return by mail heir visits, a sketch of the interior of the cabin and, if possible, a photo of the cabin.

Granger-Thye Act Permits for Recreation Cabins. By signing a ance agreement, the permittee requests that the Forest Service maintain in. The fee collected can then be used solely for cabin maintenance. ion 10 supplement to FSM 6512.22a for items which are authorized to be ed under the maintenance agreement. Form R10 2300-21 (Exhibit 2) s both the application for cabin permits and the maintenance agreement.

ies will be collected and permits issued only by qualified and properly ted Collection Officers (see FSM 6531.41b and the related R-10 ent).

7. Guidelines. The Forest will issue permits for recreation cabins subject to the following guidelines, which will be publicized:

a. Permits may be issued to individuals or groups.

b. No one under 18 years of age may be issued a permit.

c. Permits will be made out to the intended user only. If the permittee is not present with the using party, the party will be considered in trespass.

d. Only one application will be accepted from any one individual for a given cabin for a given use period.

e. Reservations will not be confirmed until payment is received for the full amount. Payment made in person may be made by United States coin or currency, money orders, cashier's checks, bank drafts, or personal checks (see FSH 6509.14, 030, Item 3). Applicants making payment by mail will be encouraged to do so by check or money order only. If a personal check is returned by a bank due to insufficient funds, the permit will be canceled and the permittee notified.

f. Reservations are from noon to noon except the John Muir Cabin, Ch3.

g. Cabin reservation requests will be confirmed no more than 180 days in advance of occupancy. Advanced reservation procedures are as follows:

(1) Requests will not be accepted more than 190 days prior to desired occupancy. Any applications received earlier than the 190th day will be promptly returned with explanation. Monies received for advance payments before the Maintenance Agreement has been executed may be held by the Unit Collection Clerk, at the Supervisor or Regional Office, not to exceed 10 days. Monies received will be recorded on the PAMARS Certificate of Deposit and Collection Register (Form R10 6500-8), and held as undeposited cash.

(2) Requests must be received by the 180th day prior to desired occupancy to receive earliest possible consideration.

(3) On the 179th day prior to desired occupancy, requests received by close of business on the 180th day will be booked. If, by the 180th day, more than one application has been received for the same cabin with the same beginning date, a drawing will be held to determine which applicant will be issued the permit (see Item 8, Unscheduled Cabin Drawings).

(4) A 190-day list, showing the earliest dates reservation applications will be accepted, and a 180-day reservation list showing the earliest dates reservations will be confirmed for each day of the year are included as Exhibit 3. These exhibit will be updated annually by December 1.

h. If no reservation is made on the 180th day prior to desired occupancy, the applicant making the earliest application prior to the day of desired occupancy will be issued the permit except as noted in Item i, below.

i. If, on any given day between the 180th day prior and the actual day of occupancy, more than one written application or more than one walk-in application is received simultaneously for the same cabin, an unscheduled cabin drawing will be held to determine which applicant will be issued the permit (see Item 8, Unscheduled Cabin Drawings).

j. The maximum length of cabin use by individuals or groups shall be set annually by the District Ranger or Monument Manager and approved by the Forest Supervisor to meet local needs. Normally, continuous use by members of a party should not exceed seven days between April 1 and October 31, and 10 days between November 1 and March 31. The annual list of maximum lengths of cabin use for each cabin will be submitted by the Forests, compiled by the Regional Office Recreation Unit, and issued as a Manual Supplement, by December 1 of each year.

k. Changes in cabins reserved and/or reservation dates may be granted. The original permit must accompany any such request for change.

l. Refund of use fees will be made if: (1) the original permit is presented in person to the permit issuing office and a request for refund is made; (2) the original permit is mailed to the issuing office, accompanied by a written request for cancellation and refund; (3) if the original permit has been lost, a refund may be made at the discretion of the District Ranger or Monument Manager, but only after the use period has expired. All refund requests must be received by the issuing office at least 10 days before the beginning date of occupancy. Prior to making refund, a Request for Cabin Refund Form R10 2300-25 (Exhibit 5) must be completed by the permittee and signed by the Collection Officer making the refund when the request is made in person. If the request for refund is by mail, the Request of Cabin Refund form is not required. See Collection Officers' Handbook, FSH 6509.14, Section 154.1, R-10 Supplement, for further instructions concerning refunding of monies collected for G-T permits.

m. Long distance telephone reservations may be made from one permit issuing office to another, only if a reservation request is being made less than two weeks in advance of the beginning date of occupancy. Requests prior

to that time must be made by telephone, in writing, or in person, by and at the expense of the party requesting the cabin. Two weeks or less prior to the date desired, after the party has obtained information on cabin availability, the party can go to the nearest Forest Service office issuing permits and have reservations confirmed over the telephone through that office for any cabin in Region 10. For example, a Cabin Reservationist Collection Officer in Juneau may call a Cabin Reservationist in Ketchikan and book a Ketchikan cabin for a visitor who has come into the Juneau office. The Juneau Cabin Reservationist will collect the money, write the permit, and give all pertinent information to the Cabin Reservationist in Ketchikan by telephone. These phone reservations will be followed by a Form R10 2300-21, Application for Cabin Permit, to confirm phone reservations and prevent double bookings.

n. If a cabin is not reserved for use by the public, governmental agencies may use cabins without charge while on official business, with the approval of and in accordance with conditions set by the District Ranger or Monument Manager. To confirm occupancy and to avoid double bookings, a permit will be issued and the reservation recorded.

o. A record of the scheduled use shall be maintained by each office that issues permits. The record may be kept on the monthly cabin reservations Form R10 2300-22 (Exhibit 4).

8. Unscheduled Cabin Drawings. All of the guidelines in Item 7 apply. In addition, the following procedures will apply:

a. If, between the 190th day and the 180th day prior to occupancy, more than one person or party requests the same cabin (other than those cabins described in Item 9a) for the same beginning date, all the applications will be put together and a drawing will be held, with one application randomly selected to receive the permit. The drawing will be conducted on the 179th day before occupancy. The person making the drawing will sign and date the permit. Whenever possible, such drawing will be made by a public neutral party.

b. If a cabin is not reserved on the 180th day prior to occupancy, on any given day between the 179th day and the actual day of occupancy, an unscheduled cabin drawing may be necessitated by: (1) more than one written application received at the same time requesting a cabin for the same beginning date; or (2) more than one walk-in applicant simultaneously requesting a cabin for the same beginning date. In such events, all applications will be put together and a drawing will be held, with one application randomly selected to receive the permit. The person making the drawing will sign and date the permit. Whenever possible, such drawing will be made by a neutral party.

c. Before the drawing, all applications will be checked to verify that multiple applications for the cabin have not been submitted by any one person (see Item 7d). If this verification process determines that an applicant has submitted multiple applications for a cabin, the applicant will be disqualified from the drawing, and will be so notified.

d. If, at the time of a drawing, there are only two applications, the unsuccessful applicant will be designated the alternate, and will be so notified by mail. At the time of notification, the alternate's payment will be returned. If the successful applicant cancels, the alternate will be notified that the cabin is available. That person or party will be given the opportunity to make payment and be issued the permit for the period of time reserved by the initially selected applicant.

e. If, at the time of the drawing, there are three or more applications, first and second alternates will be drawn, designated, and so notified by mail. At the time of notification, the alternates and all other unsuccessful applicants' payments will be returned. If the successful applicant cancels, the first alternate will be notified that the cabin is available. That person or party will be given the opportunity to make payment and be issued the permit for the period of time reserved by the initially selected permittee. If the first alternate does not elect to receive the permit, or if, after having received the permit, also cancels, the second alternate will be notified that the cabin is available. That person or party will be given the opportunity to make payment and be issued the permit for the period of time reserved by the initally selected permittee.

9. Scheduled Cabin Drawings

a. A number of cabins throughout the Region have a history of sufficiently high demand during certain portions of the year as to require a scheduled annual drawing. High demand being defined as having more than one application for a given cabin for a given time frame or given activity (i.e. opening of fishing or hunting season) for two consecutive years. A list of those cabins and the high demand dates will be prepared annually and issued as a Manual Supplement by December 1 of each year. The list will be readily available at all permit reservation offices; will be enclosed with all requests for information; and will be attached to all Forms R10 2300-21 and Recreation Cabin Brochures.

b. For those cabins with a history of requiring scheduled drawings, all the guidelines in Items 7 and 8 will apply. The detailed policy for scheduled drawings may vary between Forests. The Forest policy will be stated in a FSM Supplement. In addition, the following procedures will apply during the identified high demand dates:

(1) The policy for drawings, the dates applications will be received, and the drawing dates will be well publicized throughout the Region annually.

(2) Prior to the drawing date (179th day prior to the first day of the high demand occupancy period), no telephone reservations will be taken by any Collection Officer. All applications for permits must be in person at the office administering the cabin, or be sent by mail to the office administering the cabin.

(3) All advance reservations made for the 7- or 10-day use period immediately prior to the identified high demand use period will be issued so that they end at noon on the day of the start of the high demand use period. For example, if the historically high demand use period for a cabin is September 15-30, then advance reservations, not subject to the scheduled drawing, would end at noon on September 15. If a person or party wished to begin occupancy of the cabin prior to September 15, and extend beyond noon on September 15, they would have to submit an application for the September 15 scheduled drawing.

(4) All applicants for scheduled drawings, where payment is required with the application, will be be encouraged to make payment by check or money order. This will allow payment to be returned directly to unsuccessful applicants, thus minimizing the cost of refunds. Checks and money orders received from applicants which will be subject to a drawing will: (a) be flagged by the Collections Officer when transmitted to the Collections Clerk so they will be properly withheld until the drawing is conducted (less than 10 days); (b) be transmitted to the Collections Clerk with a separate bill for collection from monies being transmitted at the same time for cabin reservations not subject to the drawing. This will avoid later corrections on bills for collection as monies are returned to unsuccessful applicants.

10. Procedures for Issuing Permits

a. If application is received by mail and the requested cabin is available, a permit will be issued if the applicant has submitted a completed and signed application/maintenance agreement, Form R10 2300-21, along with proper remittance. The Collection Officer will sign Form R10 2300-21, if appropriate, and issue a cabin permit, Form R10 2300-20. The carbon copy of the cabin permit remains in the permit booklet. If completed and signed Form R10 2300-21 and/or proper remittance is not mailed, the reservation will be recorded as "tentative." Form R10 2300-21 will be sent to the applicant. Fourteen days will be alloted for receipt of the completed agreement and/or remittance. Upon receipt, the reservation will be "confirmed."

b. If application is in person and the requested cabin is available, the Collection Officer issues the Permit, Form R10 2300-20, after the applicant has made proper remittance and signed the Permit. The carbon copy of the permit remains in the permit booklet.

c. If application is by telephone and the requested cabin is available, the reservation will be recorded as "tentative"; Form R10 2300-21 will be sent to the applicant. Fourteen days will be allotted for receipt of the completed and signed application/maintenance agreement and proper remittance. Upon receipt, the reservation will be "confirmed" and the Collection Officer will sign the Form R10 2300-21 and issue the permit, Form R10 2300-20. The carbon copy of the cabin permit remains in the permit booklet. If the signed agreement and proper remittance is not received on the 14th day the reservation will be canceled and the cabin will be canceled and the cabin will again be available.

d. Permits must be written in ink.

e. The permit serial number, beginning with a letter representing the issuing office (such as C for Chatham, K for Ketchikan), is entered in the blank "Permit issued _____," on the bottom of each Form R10 2300-21, and the top of each permit on form R10 2300-20.

f. The signed Application/Maintenance Agreement, Form R10-2300-21, and carbon copy of the Permit, Form R10-2300-20, will be retained for two years by the issuing office before forwarding to the Forest.

g. Maintenance fees will be deposited in accordance with the Collection Officer's Handbook, FSH 6509.14, and related R-10 Supplements.

EXHIBIT 1

CABIN _____ DATE: _____
NAME TYPE

Cabin Location _____

Signs - Beach _____
Cabin _____
Boat Pull-up ____
Toilet _____
To Trail _____

Terrain - Rel. Flat _____
Rel. Hilly _____
Wooded _____
Moss Growth ____

Brush _____
Beach _____
Steep Bank ____
Bluff _____

Bunks - Single _____
Double _____
Loft _____

Water Source - Stream _____
Lake _____
Pump _____

Table _____

Boat - Type _____
Number _____

Bench _____

Oars _____ Saw _____

Cooking Bench _____

Ladder _____ Bucket _____

Food Cupboard _____

Shovel _____ Rake _____

Shelves ___ ___

Sledge ___ Maul _____

Cooler _____

Hatchet _____ Wedge _____

Stove - Sm. 2 Burner ___
Other _____

Axe - Single _____
Double _____

Thermometer ___

Log Book _____

Fireplace _____

Broom _____ Dustpan _____

Garbage
- _____ Bags
- ___ Large cans

Incinerator _____

Woodshed _____

Wood Supply _____

Additional Comments:

Windfalls in Area _____

CABIN SKETCH

WOODSHED SKETCH

EXHIBIT 2

APPLICATION FOR RECREATION CABIN PERMIT

Permits for use of recreation cabins in the National Forests of Alaska are issued on a "first-come, first serve" basis. Permits may be obtained in person or by mail. Your signature on the maintenance agreement below will allow us to use the permit fee to maintain cabins. Return the application and signed agreement with your payment and a permit will be issued. If a cabin is not available, your money will be returned. Reservations may be made up to 180 days in advance. If money is received two weeks or more before 6 month limit it will be returned.

Permits should be made out to the intended user. Otherwise, misunderstandings will occur due to lack of communication with the permittee.

The rate for occupancy is shown below. Please make check or Postal Money Order payable to USDA-Forest Service. Refunds: To be eligible for a refund, you must request it in writing at least ten (10) days before the original date of scheduled use of the cabin. The original permit must accompany the request.

Name_____ Mailing Address_____

Number in Party_____ City_____

CABIN DESIRED	NOON TO NOON (Dates Desired)	
1st Choice_____	_____	to_____
2nd Choice_____	_____	to_____
3rd Choice_____	_____	to_____

May we substitute another cabin if all your choices are unavailable?_____

Small skiffs with oars are provided at some lake cabins. Coast Guard regulations require that a Coast Guard approved flotation device be on board for each passenger. It is up to the users to provide flotation devices.

MAINTENANCE AGREEMENT

Recreation Cabin Permits are issued under the Granger-Thye Act whereby the permittee is required to assist in cabin maintenance. The fee and maintenance costs for this use are computed at $_____ per night.

The permittee hereby requests and the Forest Service agrees to perform cabin maintenance under the Act of April 24, 1950 (16 U.S.C. 572) to the limit of deposited funds.

Date_____ Signature of Permittee_____

Amount Enclosed_____ for_____ night(s)

_____
Forest Officer

Permit Issued_____
No.

EXHIBIT 3

IN RESERVATIONS - 180 DAYS

November	24	--- May	22	February	9	------August	7	April	27	--- October	23
	25	-------	23		10	----------	8		28	----------	24
	26	-------	24		11	----------	9		29	----------	25
	27	-------	25		12	----------	10		30	----------	26
	28	-------	26		13	----------	11	May	1	----------	27
December	1	-------	29		16	----------	14		4	----------	30
	2	-------	30		17	----------	15		5	---November	1
	3	-------	31		18	----------	16		6	----------	2
	4	-- June	1		19	----------	17		7	----------	3
	5	-------	2		20	----------	18		8	----------	4
	8	-------	5		23	----------	21		11	----------	7
	9	-------	6		24	----------	22		12	----------	8
	10	-------	7		25	----------	23		13	----------	9
	11	-------	8		26	----------	24		14	----------	10
	12	-------	9		27	----------	25		15	----------	11
	15	-------	12	March	2	----------	28		18	----------	14
	16	-------	13		3	----------	29		19	----------	15
	17	-------	14		4	----------	30		20	----------	16
	18	-------	15		5	----------	31		21	----------	17
	19	-------	16		6	----September	1		22	----------	18
	22	-------	19		9	----------	4		25	----------	21
	23	-------	20		10	----------	5		26	----------	22
	24	-------	21		11	----------	6		27	----------	23
	25	-------	22		12	----------	7		28	----------	24
	26	-------	23		13	----------	8		29	----------	25
	29	-------	26		16	----------	11	June	1	----------	28
	30	-------	27		17	----------	12		2	----------	29
	31	-------	28		18	----------	13		3	----------	30
January	1	-------	29		19	----------	14		4	----------	31
	2	-------	30		20	----------	15		5	---December	1
	5	---July	3		23	----------	18		8		4
	6	-------	4		24	----------	19		9	----------	5
	7	-------	5		25	----------	20		10	----------	6
	8	-------	6		26	----------	21		11	----------	7
	9	-------	7		27	----------	22		12	----------	8
	12	-------	10		30	----------	25		15	----------	11
	13	-------	11		31	----------	26		16	----------	12
	14	-------	12	April	1	----------	27		17	----------	13
	15	-------	13		2	----------	28		18	----------	14
	16	-------	14		3	----------	29		19	----------	15
	19	-------	17		6	------October	2		22	----------	18
	20	-------	18		7	----------	3		23	----------	19
	21	-------	19		8	----------	4		24	----------	20
	22	-------	20		9	----------	5		25	----------	21
	23	-------	21		10	----------	6		26	----------	22
	26	-------	24		13	----------	9		29	----------	25
	27	-------	25		14	----------	10		30	----------	26
	28	-------	26		15	----------	11	July	1	----------	27
	29	-------	27		16	----------	12		2	----------	28
	30	-------	28		17	----------	13		3	----------	29
February	2	-------	31		20	----------	16		6	----January	2
	3	-August	1		21	----------	17		7	----------	3
	4	-------	2		22	----------	18		8	----------	4
	5	-------	3		23	----------	19		9	----------	5
	6	-------	4		24	----------	20		10	----------	6

USDA - FOREST SERVICE

YEAR 1982

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3	4 3-107 $15	5 JOE JUNEAU 1220 GLACIER JUNEAU, AK. 99801 6-1234	6 6 RES. 01/3/82	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21 3-103- 08 $10	22 5 NON-RES. R. HARRIS 369 12th SEATTLE, WA. 01/4/82
23	24	25	26	27	28	29
30	31					

# of permits sold 2
Amount of money collected $25
# of parties 2
# of resident parties 1

# of individuals 11
# of nights 5
# of Nonresident parties 1
# of 12 hour visitor days 56

Month JANUARY

Cabin CHURCH BIGHT

FILE 2300 - RECREATION MANAGEMEN

EXHIBIT 4

EXHIBIT 5

REQUEST FOR CABIN REFUND

DATE:

CANCELLATION REASON:
(Write a short note explaining)

I received _____ refund for Permit # _____.
(amount)

Permittee Signature: _____.

Forest Service Officer Signature: _____.

(Staple Permit Here)

APPENDIX B

FOREST LEVEL INFORMATION PROCESSING SYSTEM
BACKGROUND INFORMATION

Introduction

The purpose of this paper is to provide a background concerning the Forest Level Information Processing System (FLIPS). The objective of FLIPS is to provide the Regional Offices, Forest Supervisors' Offices, and Ranger Districts of the Forest Service with a tool to handle their information processing workload. This tool will be able to handle word processing, entering data, editing data, local information processing, and electronic mail. These computers will be installed in all units of the Forest Service. This will allow all units of the Forest Service to use the same type of equipment from the same manufacturer.

Information Processing Assumptions

The major assumptions that can be made about information processing in the Forest Service over the next 6 years (the life of this contract) are:

- The use of information processing systems will continue to increase to satisfy Forest Service mission requirements.

- Responsiveness to public concerns and Congressional mandates will require direct access to information processing systems from all units (RO, SO, RD).

- Use of information processing facilities will continue to increase productivity.

- Personnel ceiling and budget constraints will continue.

- On-line readily available access to information for report generation or answering specific questions will be required at the Forest Supervisors' Offices and Ranger Districts.

- The rate of increase in the transmission of reports will rise faster than that for data.

- The range and availability of software systems will continue to increase (e.g., fiscal accounting, safety, log accountability, law enforcement).

- More automated systems standards will be developed and implemented.

- Standard definitions will allow use of separately developed and maintained computer programs and information sources.

- Major software conversion may be necessary about every 6 to 8 years. The level of effort will decrease as standards are more widely implemented.

- Regional Offices will not serve as Regional service centers.

Information Processing Within the Forest Service

Since its inception, the Forest Service has been a decentralized organization. One of the strengths of the organization has been in the assignment of responsibility and authority at the lowest practical field level. The Agency has always believed that if line officers are to be held accountable for accomplishment of programs, they should have the control over the resources to accomplish those programs. Until recently, cost prevented such control in the computer area. Decentralization of the control is imperative because of the nature of information flows within the National Forest System. Information in one functional area is often used by other functional areas. For example, data used in land and resource management planning is also used in Engineering and in Fiscal and Accounting applications. Site specific data is used by and kept at each of the 653 Ranger District locations. Aggregates of such information are sent to 123 Forest Supervisor's Offices. Again, information is aggregated and sent and used by the nine Regional Offices and ultimately to the National Office in Washington. The largest volume of data is kept at the Forest Supervisor's Office and/or the Ranger District Office.

Background on Distributive Processing

The Pacific Southwest Region installed a mini-computer on its National Forests beginning in 1979. This equipment is being used primarily for word processing but also for some entering of data, editing of data, local computations, and communications to the Fort Collins Computer Center. A review of the equipment's cost effectiveness (~~"Cost Effectiveness of 8-5 OEC POP-11 Systems," April 1981~~) found a savings that averaged $245,000 per Forest for the first year of operation. This was based on the assumption that the workload on the Forest remained constant. In actuality, there were substantial increases in the volume of work accomplished indicating that the savings was conservative. There were also intangible benefits such as ~~reduced word processing time, better and faster communications, improved employee morale, better management control, and higher quality work.~~

Information Processing Options

Information processing may be achieved in several ways. These may be completely centralized, totally decentralized, or a combination of the two, which we call "distributive processing".

For completely centralized information processing there must be a central facility which is capable of handling the workload of the agency. Users may come in person to the central facility or, in a geographically dispersed organization such as the Forest Service, communicate with the central facility using remote terminals.

For total decentralization, there is a distribution of communication and information processing throughout the organization. All applications are expected to be run on the local equipment. There is a network between units to allow for the electronic transmission and sharing of data and information.

For distributive processing, the ability to process information is shared between local and centralized information processing facilities. In this environment, word processing, entry of data, editing data, and some information processing are done locally, while major applications are processed by large computers at a central site. Line officers maintain control over their own equipment.

Currently in Region 10, we operate in a completely centralized environment for half the Ranger Districts and a partially decentralized environment for the Regional Office, Forest Supervisors' Offices and the other half of the Ranger Districts.

Implementation of Distributive Processing

The approach taken in developing distributive processing has been to describe the functional requirements in terms of Type A machines and Type B machines. As a general rule, the Type A machine is a mini-computer which will be located in a Regional Office or Forest Supervisor's Office. The Type B machine will be located at the Ranger District level and is basically a word processor.

A Forest Supervisor's Office typically will have a Type A machine with video terminals and printers. The Type A machine will communicate to large computers such as that located at the USDA Fort Collins Computer Center. Each system will be configured to meet the needs of each Forest.

A Type B machine will be typically found in a District Ranger's Office with several video terminals and printers. The number of video terminals and printers will depend upon the field office workload.

Word processing, entering data, editing data, and file interrogation will be performed by District personnel on the Type B machine. The running of local applications programs, data base functions, and electronic mail operations from a Type B machine will be accomplished by establishing a communications link with the Type A machine in the Forest Supervisor's Office. The Type A machine will support all the functions of the Type B machine, plus computer languages, a data base management system, electronic mail, and telecommunications.

The users of Type A and Type B machines will be personnel such as engineers, foresters, district rangers, clerks, and clerk-typists who have little or no understanding of computer concepts. For this reason, Type A and Type B machines will be "user friendly". Users who are not computer-oriented will be able to use the system effectively with minimal amounts of training, and their skills will be transportable between systems and processor types.

Current Washington Office and Region Office Distributive Processing Activities

Presently members of the FLIPS project team in the Washington Office and in the Region are working on various aspects of the procurement process. Others are concentrating on the management of the capabilities being acquired, minimizing the impact of change in the organization, and implementing these capabilities in the most effective and expedient way possible. Specifically, some of these activities include:

- Development of policy, guidelines, and procedures to manage information in a distributive processing environment.

- Analysis of skill requirements and training plans.

- Analysis of technical support requirements.

- Analysis of implementation strategies to include installation planning, configuration management, etc.

- Information dissemination guidelines to assist management and technicians in planning for the implementation of distributive processing.

Further Information

Region 10's FLIPS Technical Implementation Task Force, made up of staff from Management Systems and other staff units in the Regional Office, as well as the Computer Specialists from the Forest Supervisors' Offices, will be putting on informational sessions to keep users and managers informed about FLIPS, what it will be like, how it will involve you, and when it will arrive. The Task Force would like you to be thinking about your needs, how you could use this tool to do you job more efficiently, and then let us know what your ideas are.